Moving *to a Net-Centric Environment*

Major General Marilyn Quagliotti
Vice Director, Defense Information Systems Agency
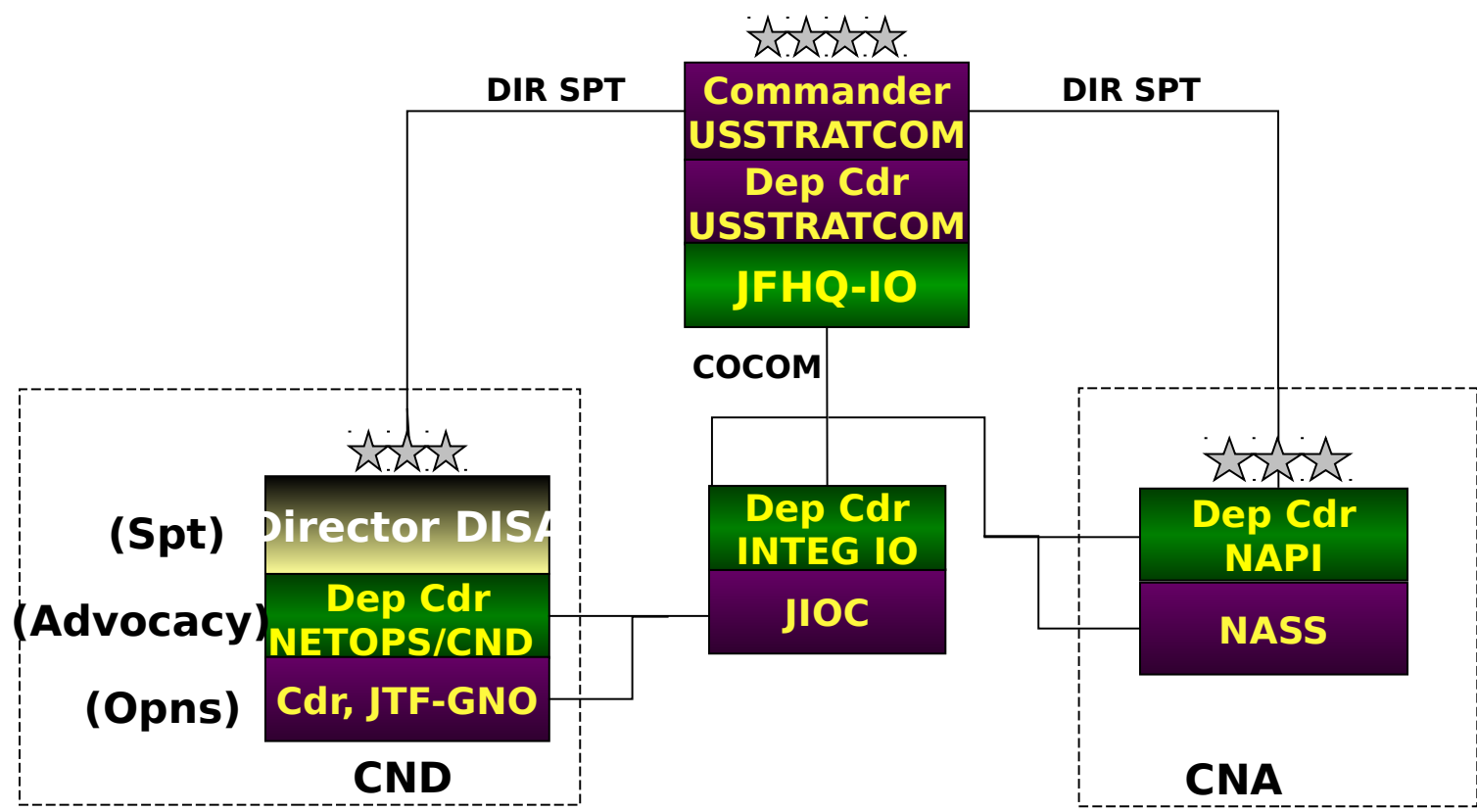11 Aug 04
2004 Acquisition Senior Leaders' Conference

Our Mission

The Defense Information Systems Agency is a combat support agency responsible for planning, engineering, acquiring, fielding, and supporting global net-centric solutions and operating the Global Information Grid to serve the needs of the President, Vice President, the Secretary of Defense, the Joint Chiefs of Staff, the Combatant Commanders, and the other DoD Components under all conditions of peace and war.

STRATCOM IO Org. Structure

DIR SPT

★★★★

Commander USSTRATCOM
Dep Cdr USSTRATCOM
JFHQ-IO

DIR SPT

COCOM

(Spt)

★★★

Director DISA
Dep Cdr NETOPS/CND
Cdr, JTF-GNO

(Advocacy)

(Opns)

CND

Dep Cdr INTEG IO
JIOC

★★★

Dep Cdr NAPI
NASS

CNA

Director, DISA designated **Commander, JTF-Global Network Operations** and **Deputy Commander for Global Network Operations and Defense, USSTRATCOM Joint Forces Headquarters-Information Operations**

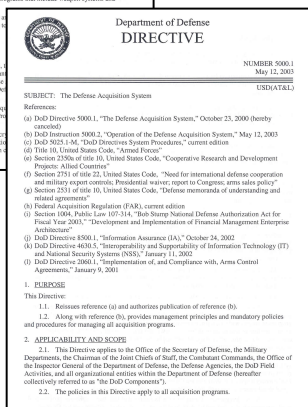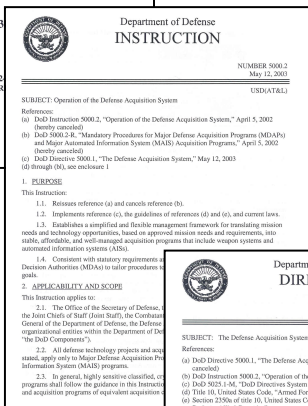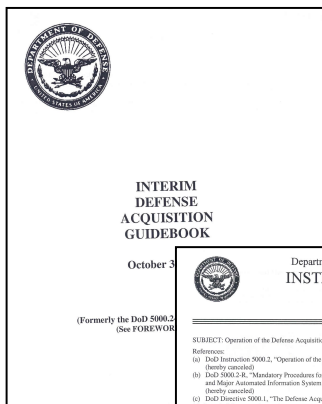**NASS – Network Attack Support Staff**   **NAPI – Network Attack Planning and Integration**

Component Acquisition Executive

Interim Defense Acquisition Guidebook

DoDD 5000.2 Operation of the Defense Acquisition System

DoDI 5000.1 The Defense Acquisition System

- **Goldwater-Nichols Act (1986) initiated DoD acquisition process directions and instructions**

- **DoD 5000-series published DoD acquisition policy, guidance, and processes (updated May 03)**

- **Component Acquisition Executive = a DoD component-level acquisition decision authority (DoDD 5000.2)**

- **CAEs implement DoD 5000-series policy and guidance**

- **DISA CAE delegation (Aug 02)**

- **New full-time DISA CAE and office (1 Oct 03)**

versees and Guides all DISA Programs/Project

Workforce Reshaping

BEFORE (Aug 03)

■ Clerical (518)	
■ 340/6 (568)	
□ 391/2 (601)	
□ 500 (306)	
■ 854/5 (399)	
■ 1100 (193)	
■ 1410 (115)	
□ 1550 (181)	
■ 2210 (2748)	
□ Other (393)	
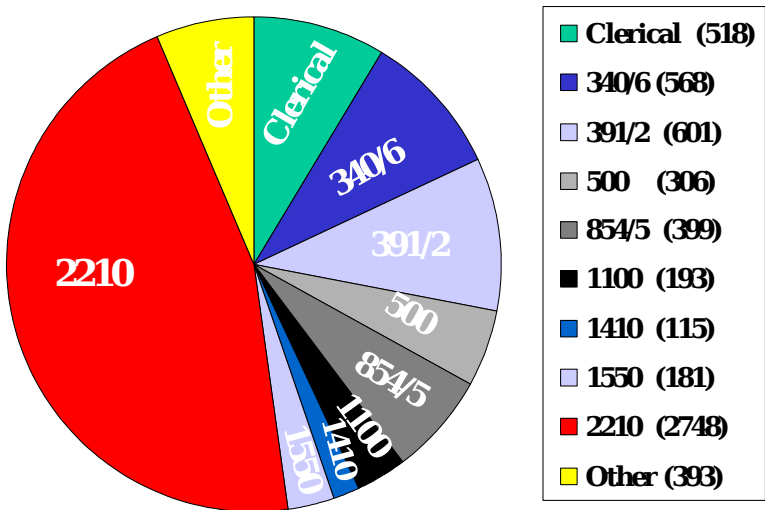
AFTER (Now – Excludes DECC Downsizing)

■ Clerical (478)	-40
■ 340/6 (574)	+6
□ 391/2 (574)	-27
□ 500 (301)	-5
■ 854/5 (457)	+58
■ 1100 (203)	+10
■ 1410 (111)	-4
□ 1550 (357)	+17
■ 2210 (2555)	6 –
□ Other (307)	193
	-86
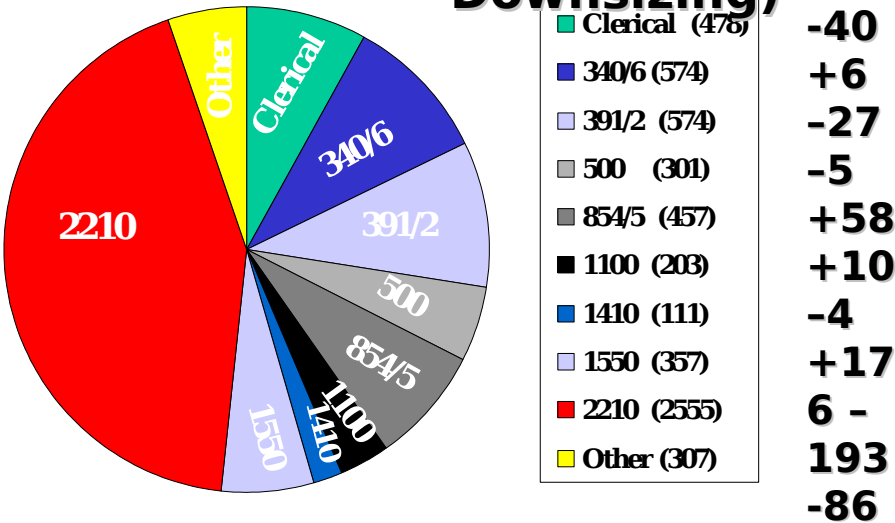
Clerical = Admin (-40)

340/6 = Mgmt Analysts (+6)

391/2 = Telecomm (-27)

500 = Financial Series (-5)

854/5 = Engineers (+58)

1100 = Acquisition (+10)

1410 = Tech Librarians (-4)

1550 = Cmptr Science (+176)

2210 = Info Tech Spec (-193)

Other = Misc Series (-86)

AGENCY ATTRITION RATE – 7%

GIG Bandwidth Expansion: Enhancing DISN

Supports the war on terrorism and transformation of US defense by providing survivable, critical network foundation that enables worldwide network-centric operations.

Multiple locations in NCR

Korea

Japan

Okinawa

Hawaii

Guam

Increased Bandwidth

IOC Sep 04 FOC Sep 05

Physical Diversity
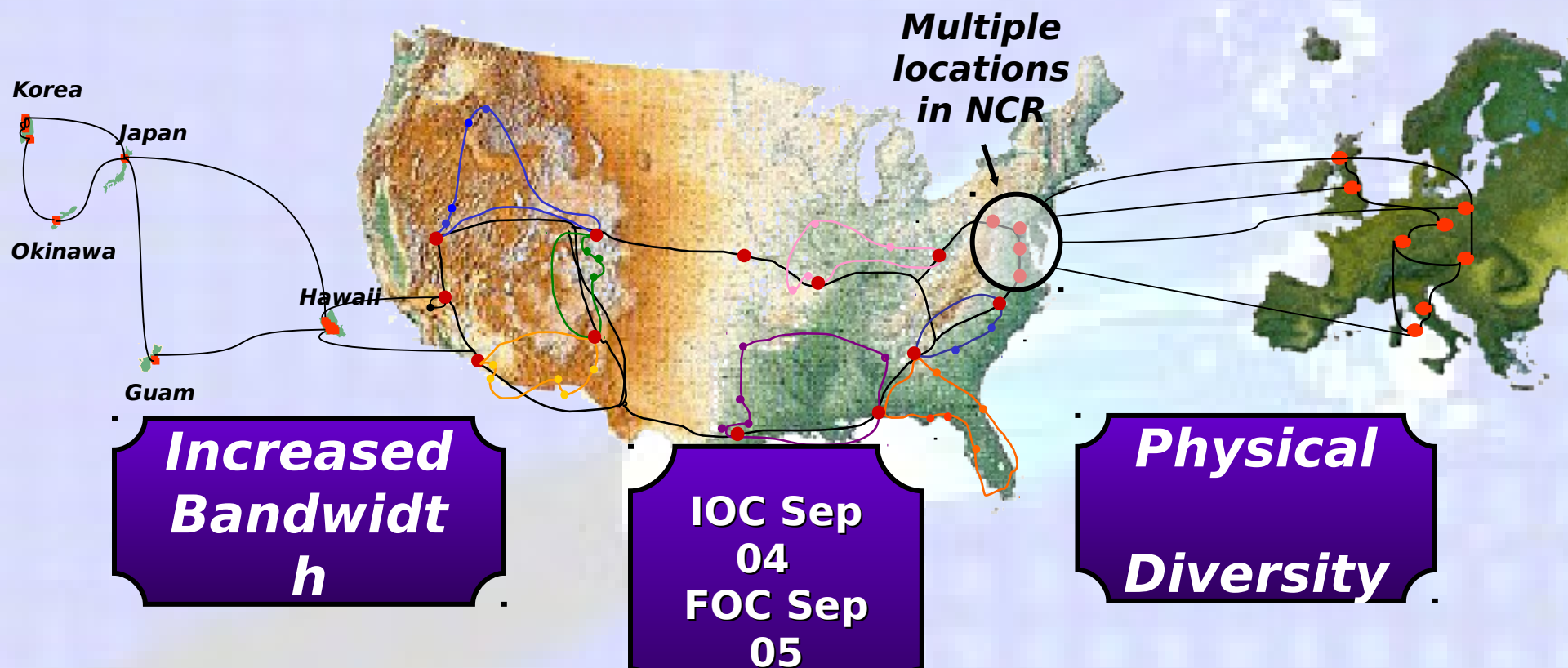
quitous, Secure, Robust, Optical IP Terrestrial Netw

Next Generation DISN
DISN Migration to GIG-BE
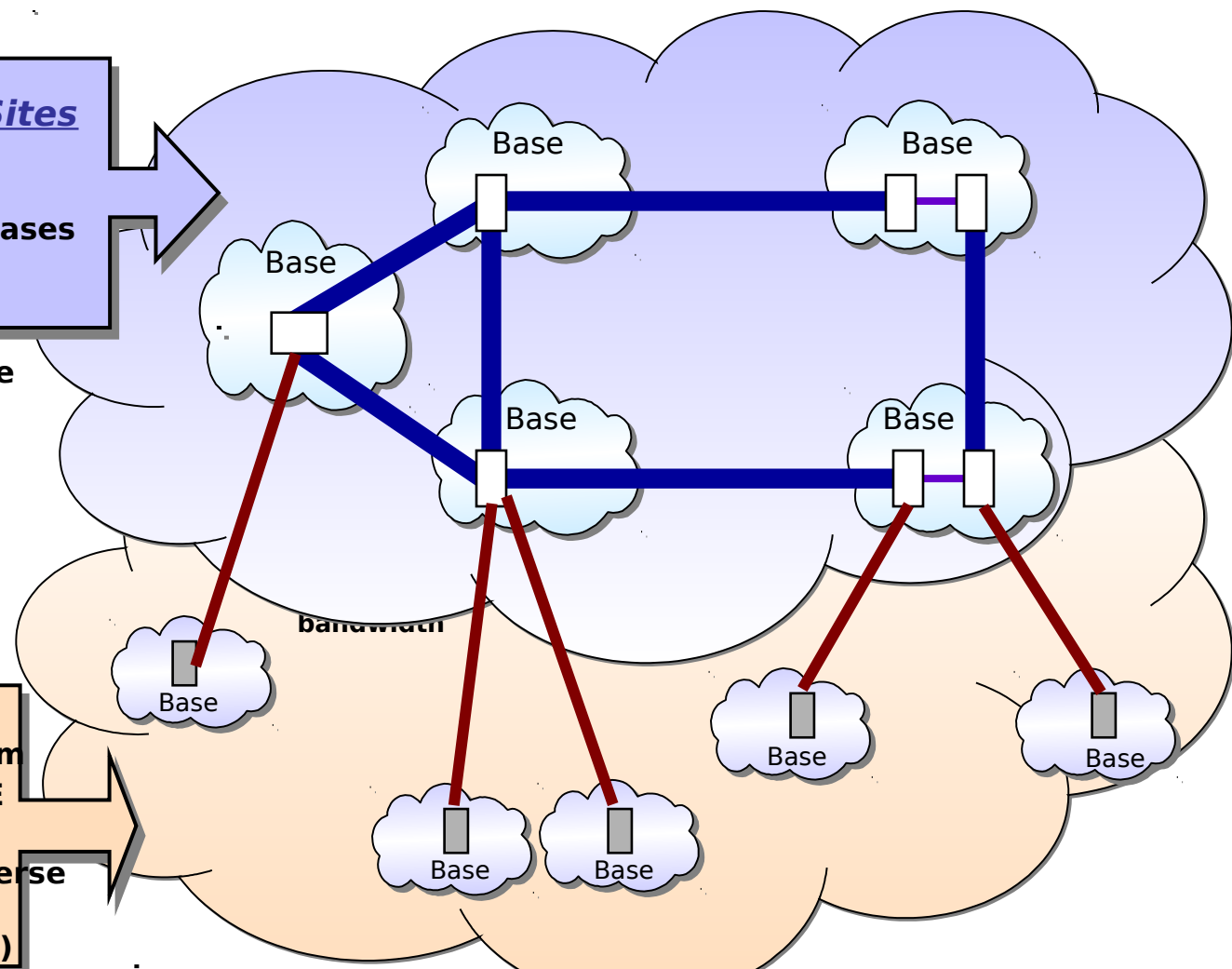
GIG Bandwidth Expansion Sites (~90):
- **Funded by GIG-BE Program**
- **Physically Diverse Access To Bases**
- **0.15 to 10 GBPS Minimum (As Affordable)**
- **Minimal Latency**
- **Rapid Provisioning Across Core**

Other DISN Sites (~600):
- **Not funded by GIG-BE Program**
- **Optimized Access Into GIG-BE Sites**
  - **Possibility of Physically Diverse Routes In Metro Areas**
- **Up to 10 GBPS (As Affordable)**
- **Reduced Latency**

Base

Base

Base

Base

Base

Base

bandwidth

Base

Base

Base

Base

Base

While Converging Voice, Data and Video over

- **Bandwidth** (Plug into the network)

- **Information On**

Net-Centric Enterprise Service
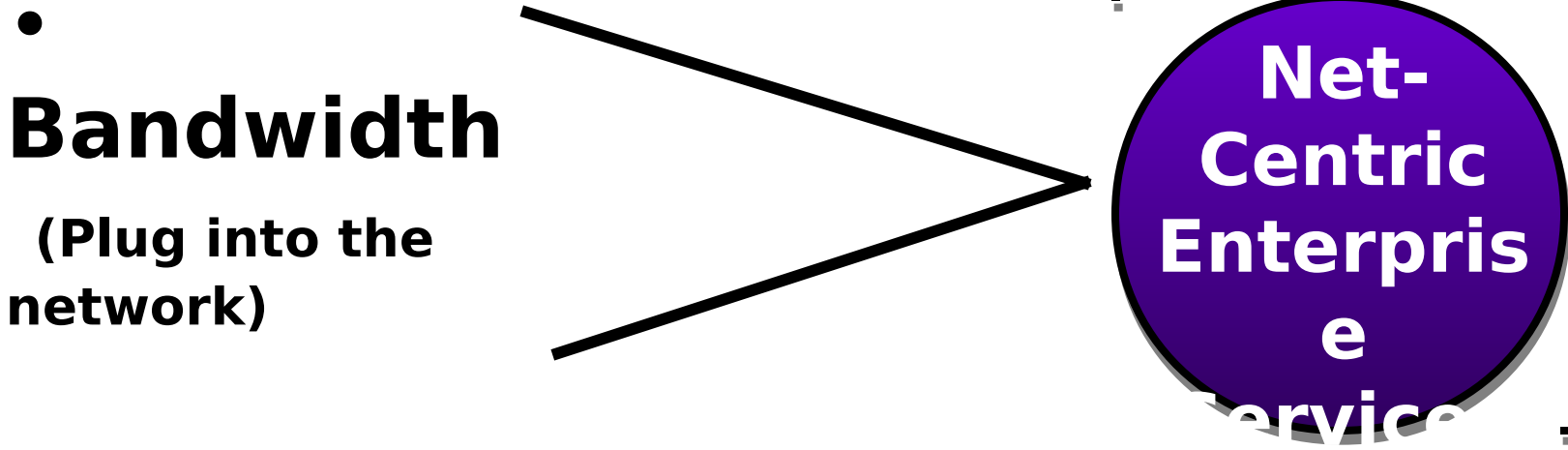
Service-Based Infrastructure rather than a Systems-Based Infrastructure

Distributed Systems Capabilities

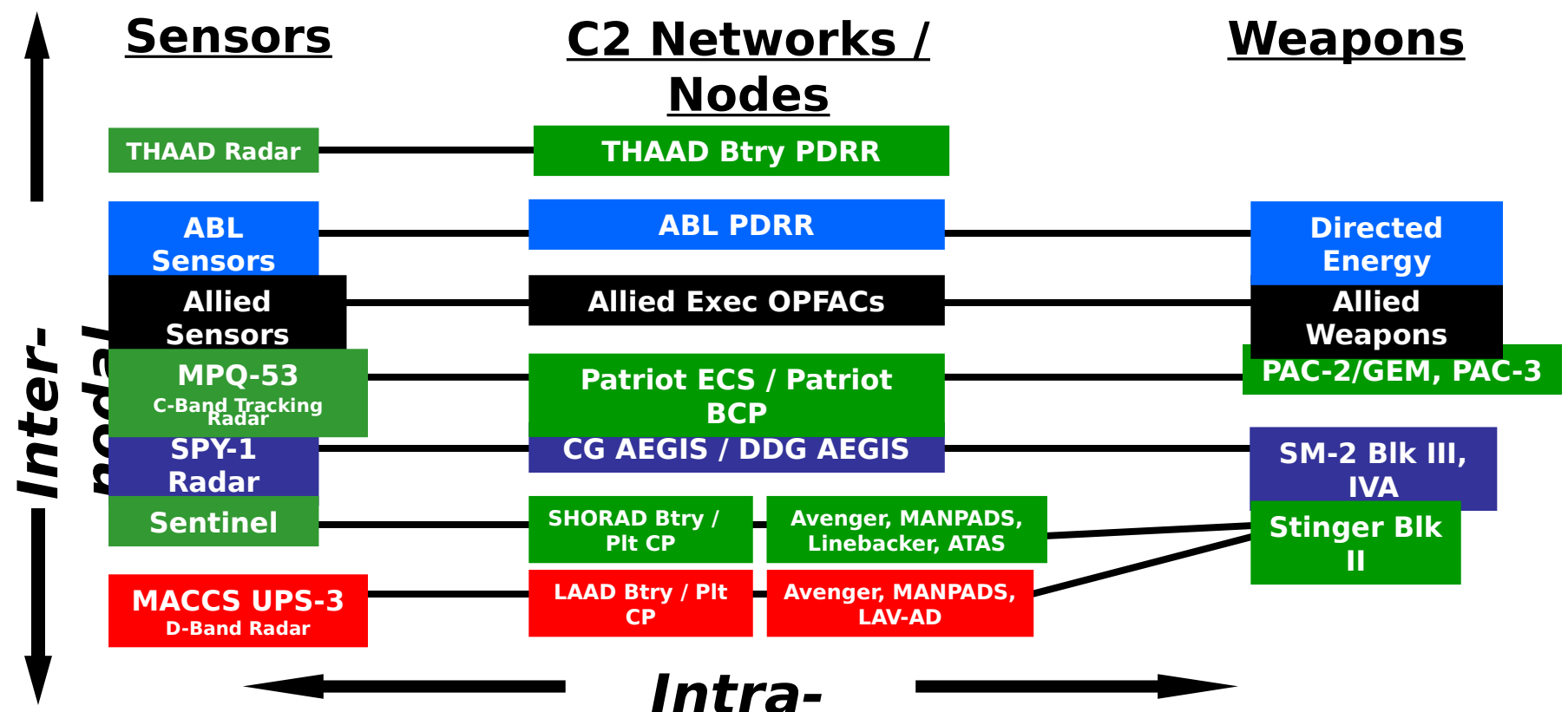| Sensors	C2 Networks / Nodes	Weapons
THAAD Radar	THAAD Btry PDRR	
ABL Sensors	ABL PDRR	Directed Energy
Allied Sensors	Allied Exec OPFACs	Allied Weapons
MPQ-53 **C-Band Tracking Radar**	Patriot ECS / Patriot BCP	PAC-2/GEM, PAC-3
SPY-1 Radar	CG AEGIS / DDG AEGIS	SM-2 Blk III, IVA
Sentinel	SHORAD Btry / Plt CP	Avenger, MANPADS, Linebacker, ATAS	Stinger Blk II
MACCS UPS-3 **D-Band Radar**	LAAD Btry / Plt CP	Avenger, MANPADS, LAV-AD

Inter-nodal

Intra-nodal

ABL PDRR – Airborne Laser Program Definition and Risk Reduction

CG / DDG – Guided Missile Cruiser / Guided Missile Destroyer

LAAD – Low Altitude Air Defense
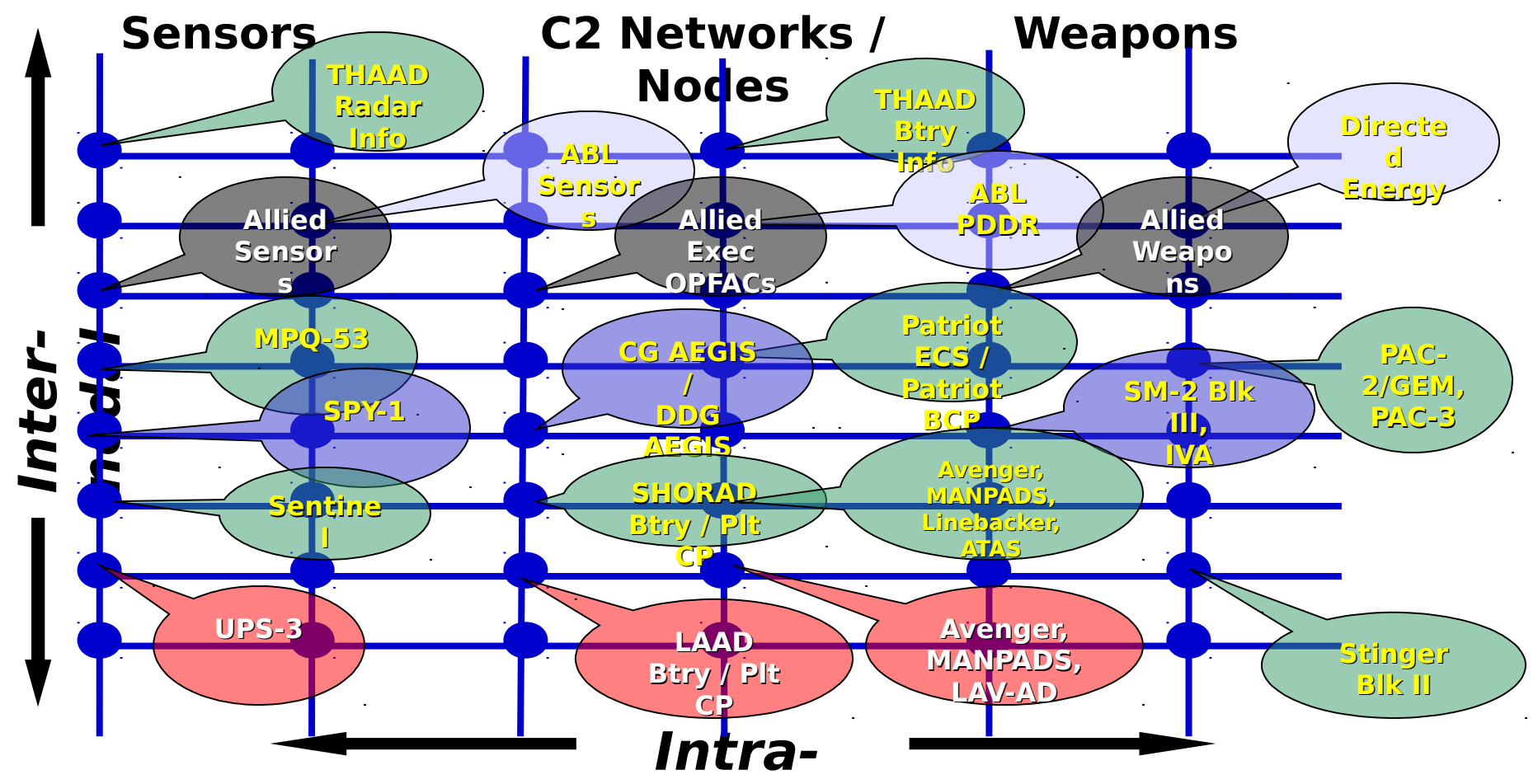
LAV-AD – Light Armored Vehicle Air Defense

MACCS – Marine Air Command and Control System

SM-2 – Land Attack Standard Missile

THAAD – Terminal High-Altitude Area Defense

Today's Information Flow

Distributed Systems Capabilities

Sensors

C2 Networks / Nodes

Weapons

Inter-nodal

Intra-nodal

- THAAD Radar Info
- ABL Sensors
- THAAD Btry Info
- Directed Energy
- Allied Sensors
- Allied Exec OPFACs
- ABL PDDR
- Allied Weapons
- MPQ-53
- CG AEGIS / DDG AEGIS
- Patriot ECS / Patriot BCP
- PAC-2/GEM, PAC-3
- SPY-1
- SM-2 Blk III, IVA
- Sentinel
- SHORAD Btry / Plt CP
- Avenger, MANPADS, Linebacker, ATAS
- UPS-3
- LAAD Btry / Plt CP
- Avenger, MANPADS, LAV-AD
- Stinger Blk II
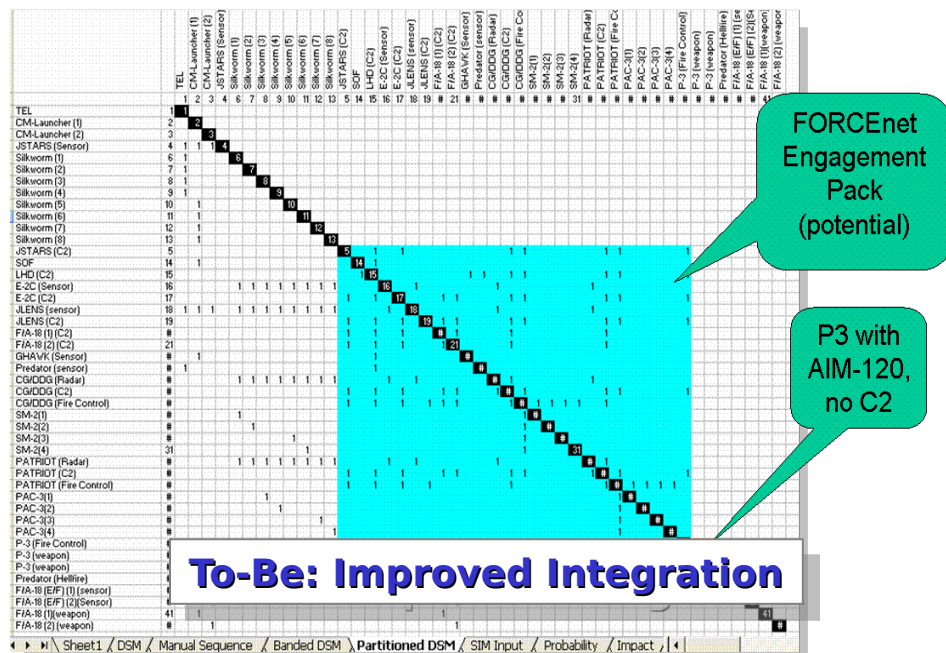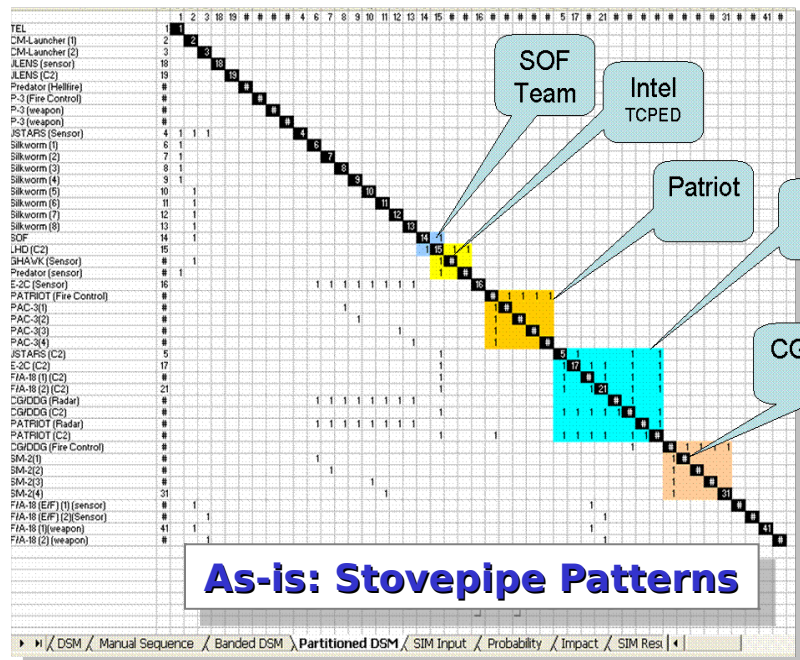
NCES Will Allow Information Exchange Across Weapons Systems and Sensors

Tomorrow: NCES / GES

Integration Pattern Emergence

As-is: Stovepipe Patterns

To-Be: Improved Integration

TCPED – Tasking, Collection, Processing, Exploitation and Dissemination

CG/DDG – Carrier Group/Guided Missile Destroyer

(NCES – GES)

Even the smallest units can pull whatever data they need, whenever they need it, from wherever

Net Centric Enterprise Services

A core piece of the larger GIG Enterprise Services (GES) vision.

BUSINESS DOMAINS
- Installations & Environment
- Human Resources
- Strategic Planning & Budget
- Accounting & Finance
- Logistics
- Acquisition

WARFIGHTER DOMAINS
- Command & Control
- Force Application
- Protection
- Focused Logistics
- Battlespace Awareness

National Intelligence Domains

Controlled Info Exchange (CIE)

IC Org Spaces

Institutional COIs

Expedient COIs

Information Exchange

User/ Entity

C r o s s   D o m a i n   C O I s

Domain/COI Services

Specialized functional area information and services

Application
IA/Security
ESM

User Assistant
IA/Security
ESM

Storage
IA/Security
ESM

Messaging
IA/Security
ESM

IA/Security
ESM

Discovery
IA/Security
ESM

Collaboration
IA/Security
ESM

Mediation
IA/Security
ESM

Enterprise Service Management (ESM)
IA/Security

Controlled UNCLAS

Classified

NCES Program

Core information and services anyone can use

Controlled Info Exchange

Allied/ Coalition & Multi-national

Core Enterprise Services (CES)

Notional NCES ECM Environments

MS A   MS B   MS C

| Developer s | Developer s | Pilot Users | NCES Users |

Candidate ECMs

Load Balancer Router

Load Balancer Router

Load Balancer Router

Web

Data **Application**

Operating Environments Supported: Microsoft, LINUX, and Solaris*

Test and Integration Environment

Web

Data **Application**

Operating Environments Supported: Microsoft, LINUX, and Solaris*

Staging Environment

Web

Data **Application**

Operating Environments Supported: Microsoft, LINUX, and Solaris*

Pilot Environment

Web

Data **Application**

Operating Environments Supported: Microsoft, LINUX, and Solaris*

Production/Sustainment Environment

DT   **OA** ➡ **OT**

*Latest Shipping Operating Versions: Currently Solaris 10, Red Hat 7.3, and Microsoft 2003 Server

One Test Environment
Comprised of Distributed Complementary Facilities

Eagle Lab & Test Center

JITC, Ft. Huachuca Test Center

Bridge

JNTC

DECCS

Test Ranges

M&S

Net-Centric Test beds (GIG E2E EF)

DCTF, Slidell Test Center

JITC, Indian Head Test Center

GIG BE

GIG-BE   JDEP   DREN   DISN-LES

NIPR / SIPR
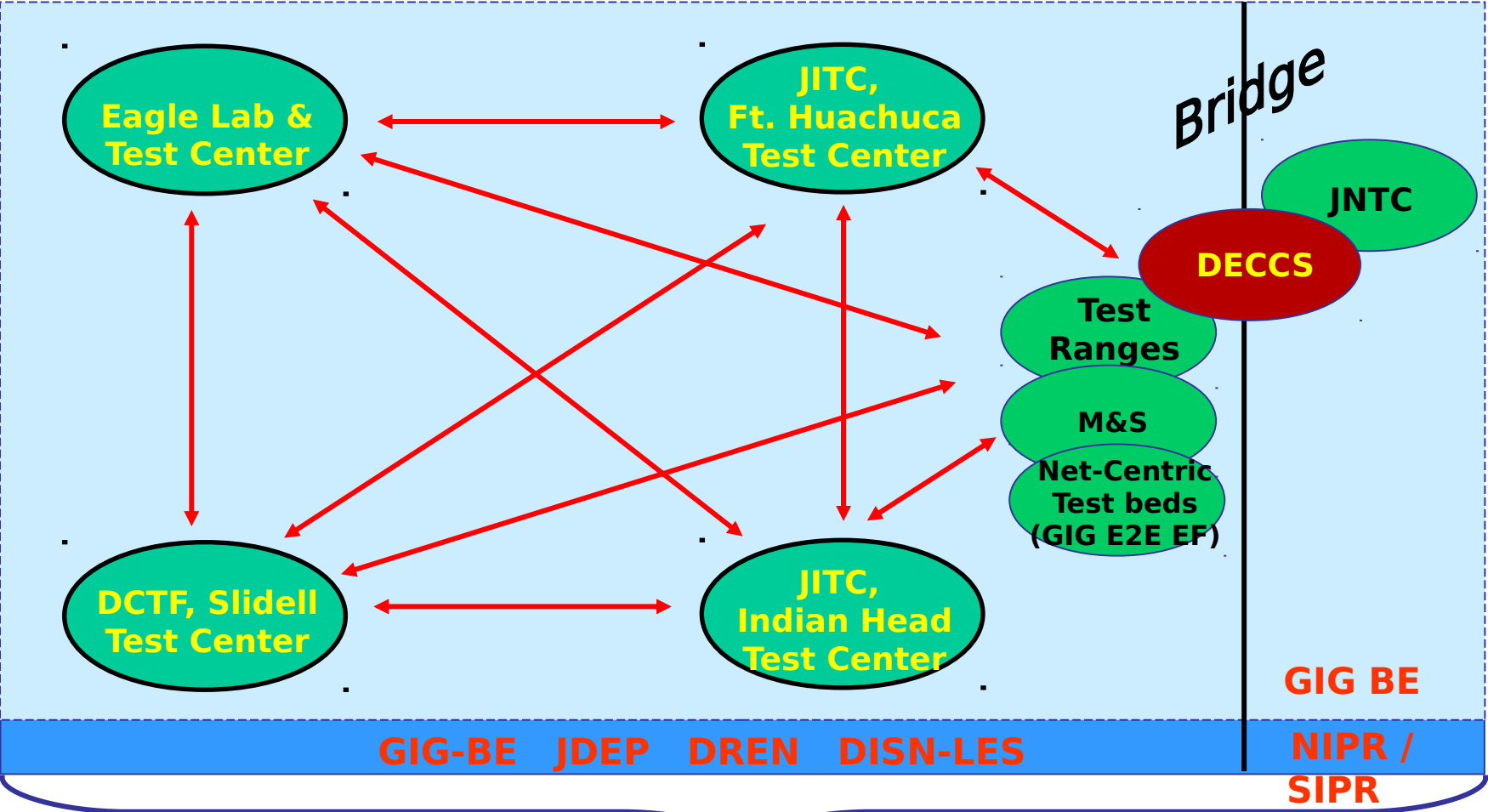
Persistent Environments Appropriate Security Controls

End to End Capability Global Reach